UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/553,524	04/20/2000	Charles Eric Hunter	WT-8	5419

7590 04/25/2003

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP
1300 I STREET, N.W.
WASHINGTON, DC 20005-3315

EXAMINER
KOENIG, ANDREW Y

ART UNIT	PAPER NUMBER
2611	9

DATE MAILED: 04/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/553,524	Applicant(s) HUNTER ET AL.
	Examiner Andrew Y Koenig	Art Unit 2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-110 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-110 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 24 July 2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

2. Each of the U.S. Patents has been considered. However, the foreign patents and non-patent literature has not been considered because the parent application 09/385,671 was unavailable at the time of initial prosecution.

Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claims 1-12, 13-19, and 20 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-12, 15-21, and 23 of copending

Application No. 09/436,281, respectively. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21-25, 30-32, 34-38, 40, 43, 50-55, 58-60, 74-94, 65-72, 98-105, and 109-110 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,619,247 to Russo.

Regarding independent claim 21, Russo teaches transmitting movies and music selections to customers via a cable television input or a satellite (col. 6, ll. 9-12), and permitting the user to pre-select and record a movie, along with automatically recording a movie (Abstract). Additionally, Russo teaches that it is within in the scope to include audio selections (col. 6-7, ll. 65-3). Furthermore, Russo teaches playing back the preselected movie, (figure 1; col. 3-4, ll. 65-2). Russo teaches communicating the movie selection to a program provider (col. 6, ll. 9-12), which equates to a central controller system, the program provider of also bills the customers for the recorded selections and movies that actually played (col. 5, ll. 1-10). Russo teaches using a key to decode a program to permit viewing (col. 6, ll. 12-24, 46-53), which reads on encoding the movies to permit playback with compatible playback devices. Russo

teaches using a CD-ROM to store audio and video programs (col. 7, ll. 44-51) Russo teaches billing the customer based on their respective selections (col. 6, ll. 35-53).

Regarding claims 22-24, the limitations of claims 22-24 have been addressed in the discussion of claim 21.

Regarding claim 25, Russo teaches compressing digital data prior to transmission (col. 7, ll. 20-22) and decompressing the data prior to displaying (col. 7, ll. 55-61).

Regarding claim 30, Russo teaches transmitting additional information, such as title, cast, program genre (col. 3, ll. 15).

Regarding claim 31, Russo teaches downloading title information (col. 3, ll. 15), which is the broadest reasonable interpretation of program listings.

Regarding claim 32, clearly the system of Russo periodically updating the additional data in order to accurately store programs as they are sent downstream (col. 3, ll. 12-16).

Regarding claims 34-37, the limitations of claims 34-37 have been addressed in the discussion of claim 2.

Regarding claims 38 and 72, Russo teaches sending a key to a specific user (col. 6, ll. 12-16), which reads on altering the preselected and stored data to identify a particular customer.

Regarding claim 40, Russo is silent on automatically selecting storage of additional information according to predetermined criteria, where the criteria is user preferences (col. 3, ll. 12-16).

Regarding claims 43 and 58, Russo teaches customer preferences (col. 3, ll. 12-16).

Regarding claims 50, the limitations of claims 50 have been addressed in the discussion of claim 4.

Regarding claims 51 and 77, the limitations of claims 51 and 77 have been addressed in the discussion of claim 21, and add the limitations of automatically selected according to predetermined criteria, which is taught by Russo (col. 3, ll. 12-16). Additionally, the claim adds the limitation of verifying that the program has been displayed, which is also taught by Russo (col. 5, ll. 1-8).

Regarding claims 52-54, 78-79, the limitations of claims 52-54 have been addressed in the discussion of claim 21.

Regarding claim 55, the limitations of claim 55 have been addressed in the discussion of claim 25.

Regarding claim 59, Russo teaches selecting Westerns (col. 4, ll. 59-63), which is entered data.

Regarding claim 60, Russo is teaches on transmitting classification information, comparing the classification information, and automatically selecting the programs to be stored (col. 3, ll. 12-16).

Regarding claims 65-68, the limitations of claims 65-68 have been addressed in the discussion of claims 21.

Regarding claim 69, the limitations of claim 69 have been addressed in the discussion of claim 25.

Regarding claims 70-71, the limitations of claims 70-71 have been addressed in the discussion of claim 21.

Regarding claim 74, the limitations of claim 74 have been addressed in the discussion of claim 21.

Regarding claim 75, the limitations of claim 75 have been addressed in the discussion of claim 21.

Regarding claims 76, the limitations of claim 76 have been addressed in the discussion of claim 21.

Regarding claim 80, the limitations of claim 80 have been addressed in the discussion of claim 21.

Regarding claims 81, the limitations of claim 81 have been addressed in the discussion of claim 25.

Regarding claims 82-86, the limitations of claims 82-86 have been addressed in the discussion of claims 56-60.

Regarding claims 87, the limitations of claim 87 have been addressed in the discussion of claims 21.

Regarding claims 88-91, the limitations of claims 88-91 have been addressed in the discussion of claim 21.

Regarding claims 92-93, the limitations of claims 92-93 have been addressed in the discussion of claims 75-76.

Regarding claims 94, the limitations of claim 94 have been addressed in the discussion of claim 25.

Regarding claims 98-102, the limitations of claims 98-102 have been addressed in the discussion of claim 21.

Regarding claims 103, the limitations of claim 103 have been addressed in the discussion of claim 92.

Regarding claims 104, the limitations of claim 104 have been addressed in the discussion of claim 93.

Regarding claims 105, the limitations of claim 105 have been addressed in the discussion of claim 25.

Regarding claims 109-110, the limitations of claims 109-110 have been addressed in the discussion of claims 58-59.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-4, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo in view of U.S. Patent 4,789,863 to Bush.

Regarding claim 1, Russo teaches transmitting movies and music selections to customers via a cable television input or a satellite (col. 6, ll. 9-12), and permitting the user to pre-select and record a movie (Abstract); additionally, Russo, teaches that it is within in the scope to include audio selections (col. 6-7, ll. 65-3). Furthermore, Russo

teaches playing back the preselected movie, (figure 1; col. 3-4, ll. 65-2). Russo teaches communicating the movie selection to a program provider (col. 6, ll. 9-12), which equates to a central controller system, the program provider of also bills the customers for the recorded selections and movies that actually played (col. 5, ll. 1-10). Russo is silent on billing customers for recording music.

Bush teaches billing the customer prior to recording a music selection (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by bill customers for music recordings as taught by Bush in order to economically distribute music while simultaneously allowing the user to access and record the information thereby allowing more services accessible to the user.

Regarding claim 2, Russo teaches using a key to decode a program to permit viewing (col. 6, ll. 12-24, 46-53), which reads on encoding the movies to permit playback with compatible playback devices.

Regarding claim 3, Russo teaches using a CD-ROM to store audio and video programs (col. 7, ll. 44-51), but is silent on playing the CD in other devices. Bush teaches copying music to cassette tapes and CDs (col. 5, ll. 27-29), which clearly can be played back on conventional devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by using a medium that can be played back on compatible devices such as tapes and CDs as taught by Bush in order to efficiently promote the music in the artist and reaping the

benefits of a portable medium in that the user can listen to the music at their convenience.

Regarding claim 4, Russo teaches billing the customer based on their respective selections (col. 6, ll. 35-53).

9. Claims 26-29, 46-49, 56, 57, 61-64, 95, and 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo.

Regarding claims 26, 27, 28, and 29, Russo is silent on transmitting at predetermined time of the day, at prime time, or a new release. Official Notice is taken that transmitting at a predetermined time of the day or new releases is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by transmitting at a predetermined time of the day, such as prime time, and new releases in order to provide the users the programming when most desired.

Regarding claim 46-49, Russo is silent on detecting data errors in the stored content, informing the customer of detected data errors and providing the option with errors or repairing the errors, retransmissions, and informing the customer of the degree of errors. Official Notice is taken that detecting and repairing errors, retransmission of data, and customer notifications are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by detecting and repairing errors along with notifying the user in order permit the user to select the quality of the programming due to the error rates.

Regarding claims 56 and 57, Russo is silent on a criteria is randomly on a periodic basis and popularity. Official Notice is taken that using random processes and selecting based on popularity are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by using random processes and selecting based on popularity in order to expose the user to a variety of programming.

Regarding claims 61-64, Russo is silent on overwriting the oldest stored data, older released data, or least fit preferences of the customer. Official Notice is taken that deleting the oldest stored data, older released data, and least fit preferences of the customer are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by deleting the oldest stored data, older released data, or least fit preferences in order to remove content least desirable to the user.

Regarding claims 95, the limitations of claim 95 have been addressed in the discussion of claim 46.

Regarding claims 106, the limitations of claim 106 have been addressed in the discussion of claim 46.

Regarding claims 107-108, the limitations of claims 107-108 have been addressed in the discussion of claims 56-57.

10. Claims 33, 41, 44-45, and 96-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo in view of U.S. Patent6,177,931 to Alexander et al. (Alexander).

Regarding claim 33, Russo is silent on displaying data content by category. Alexander teaches displaying content by category (fig. 7, 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by displaying content by category as taught by Alexander in order to efficiently browse through programming.

Regarding claim 41, Russo teaches additional information but is silent on promotional information. Alexander teaches promotional information about programming (fig. 10A, 10B). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by displaying promotion information as taught by Alexander in order to encourage the user to select the program.

Regarding claims 44 and 45, Russo is silent on customer profile. Alexander teaches a profile and program suggestions (col. 30, ll. 54-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by implementing a profile and program suggestions as taught by Alexander in order to inform and aid the user in program selection.

Regarding claim 96, Russo is silent on displaying a listing, traversing the listing, and selecting a desired one from the list. Alexander teaches displaying, traversing a listing, and selecting a desired program from the listing, which is done using the EPG

(col. 3, ll. 21-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by displaying a listing, traversing the listing, and selecting one from the listing as taught by Alexander in order to facilitate selecting programs thereby becoming more user-friendly.

Regarding claim 97, Russo is silent on buttons, which traverse the listings and selecting a desired one of the listing. Alexander teaches a remote control, which has buttons for traversing the listings (fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by using buttons to traverse the listing as taught by Alexander in order to facilitate selecting programs thereby becoming more user-friendly.

11. Claims 39, 42, and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo in view of U.S. Patent 6,522,769 to Rhoads et al. (Rhoads).

Regarding claims 39 and 73, Russo is silent on a digital watermark. Rhoads teaches a reconfigurable watermark detector, which can detect watermarks in video signals for security purposes (col. 1-2, ll. 49-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by using watermarks as taught by Rhoads in order to increase security and prevent unauthorized viewing.

Regarding claim 42, Russo is silent on the additional information is a soundtrack corresponding to the video image data. Rhoads teaches a watermark that permits the

user to purchase the soundtrack to a movie (col. 13, ll. 5-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by purchasing a soundtrack to a movie as taught by Rhoads in order to present extra opportunities to purchase the CD.

12. Claims 5-6, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo and U.S. Patent 4,789,863 to Bush in view of U.S. Patent 4,809,325 to Hayashi et al.

Regarding claim 5, Russo teaches using satellites for a blanket transmission (col. 6, ll. 9-12), but fails to teach a direct broadcast satellite, optical fiber, cable modem, or the Internet. Hayashi teaches using a direct broadcast satellite (fig. 1, col. 2, ll. 54-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by using a direct broadcast satellite as taught by Hayashi in order to enhance services provided through satellites thereby enhancing the user's experience.

Regarding claim 6, Russo teaches sending transmissions of multiple channels (col. 6, ll. 55-62). Russo teaches using satellites for a blanket transmission (col. 6, ll. 9-12), but fails to teach a direct broadcast satellite, optical fiber, cable modem, or the Internet. Hayashi teaches using a direct broadcast satellite (fig. 1, col. 2, ll. 54-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by using a direct broadcast satellite as taught by

Hayashi in order to enhance services provided through satellites thereby enhancing the user's experience.

13. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo and U.S. Patent 4,789,863 to Bush in view of U.S. Patent 5,610,653 to Abecassis.

Regarding claim 7, Russo and Bush fail to teach transmitting movies time-compressed. Abecassis teaches burst downloads, which transmit compressed movies at a higher rate than which it would be in real-time (col. 37, ll. 50-54; col. 37-38, ll. 61-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Russo and Bush by transmitting movies time-compressed as taught by Abecassis in order to maximize the bandwidth within a channel, thereby minimizing the actual download times, thus maximizing efficiency.

Regarding claim 8, the limitations of claim 8 have been addressed in the discussion of claim 5.

Regarding claim 9, Russo and Bush fail to teach transmitting at a write speed faster than real-time, which is taught by Abecassis (col. 37, ll. 50-54; col. 37-38, ll. 61-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Russo and Bush by transmitting movies time-compressed faster than real-time as taught by Abecassis in order to maximize the bandwidth within a channel, thereby minimizing the actual download times, thus maximizing efficiency.

Regarding claim 10, Russo, Bush and Abecassis are silent on teaching transmitting at rates 8-10 times real-time. Official Notice is taken that different rates are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Russo, Bush, and Abecassis by transmitting movies 8-10 times faster than real-time in order to maximize the bandwidth within a channel, thereby minimizing the actual download times, thus maximizing efficiency.

Regarding claim 11, Russo, Bush and Abecassis are silent on teaching resolution rates on the orders of VHS. Official Notice is taken that different resolutions are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Russo, Bush, and Abecassis by transmitting movies at different resolution rates, such as VHS quality in order to reduce the size of the movie thereby maximizing the bandwidth within a channel, minimizing the actual download times, maximizing the storage capacity on the user's device, thus maximizing efficiency.

Regarding claim 12, Russo, Bush and Abecassis are silent on teaching 12 Mb/s or greater write speeds. Official Notice is taken that writing speeds are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Russo, Bush, and Abecassis by using a 12 Mb/s or greater write speed in order to reduce the time to actually store the movie at the user's device thereby minimizing the waiting time, thus creating a more user-friendly system.

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo and U.S. Patent 4,789,863 to Bush in view of U.S. Patent 5,438,355 to Palmer.

Regarding claim 20, the limitations of claim 23 have been addressed in the discussion of claim 1. Whereas Russo teaches databases for managing information at the user's device, Russo is silent on using a database at a central controller associated with an address. Palmer teaches a database (fig. 1, label 20) located at the central exchange, which maintains billing and address information (col. 3, ll. 33-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo by implementing a database as taught by Palmer in order to maintain address and billing information thereby keeping accurate records and efficiently managing data.

15. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo in view of U.S. Patent 4,789,863 to Bush, U.S. Patent 5,438,355 to Palmer, U.S. Patent 4,809,325 to Hayashi, and U.S. Patent 5,610,653 to Abecassis.

Regarding claim 13, the limitations of claim 13 have been addressed in the discussion of claims 1, 5, 9, and 20.

Regarding claim 14, the limitations of claim 14 have been addressed in the discussion of claim 12.

Regarding claim 15, the limitations of claim 15 have been addressed in the discussion of claim 12.

Regarding claim 16, the limitations of claim 16 have been addressed in the discussion of claims 10 and 11.

Regarding claim 17, Russo fails to teach transmitting movies time-compressed. Abecassis teaches burst downloads, which transmit compressed movies at a higher rate than which it would be in real-time (col. 37, ll. 50-54; col. 37-38, ll. 61-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Russo and Bush by transmitting movies time-compressed as taught by Abecassis in order to maximize the bandwidth within a channel, thereby minimizing the actual download times, thus maximizing efficiency. Additionally, one of ordinary skill in the art would readily recognize the transmission/recording times are dependent on bandwidth capacity of the network, writing and processing speeds, and the size of the data.

16. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,247 to Russo, U.S. Patent 4,789,863 to Bush and U.S. Patent 4,809,325 to Hayashi, and U.S. Patent 5,610,653 to Abecassis in view of U.S. Patent 5,621,840 to Kawamura et al.

Regarding claim 18, Russo, Bush, Abecassis, and Hayashi are silent on teaching a memory buffer before recording. Kawamura teaches buffering data prior to recording

(fig. 1; col. 1, ll. 28-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Russo, Bush, Abecassis, and Hayashi by buffering prior to recording as taught by Kawamura in order to prevent errors during writing, such as buffer under-running thereby implementing a more efficient and robust system.

Regarding claim 19, Russo teaches magnetic, optical, and magneto-optical mediums as storage, but is silent on using a buffer. Russo, Bush, Abecassis, and Hayashi are silent on teaching a memory buffer including a magnetic drive, optical drive, or magneto-optical drive. Kawamura teaches a memory buffer with the drive, where the drive is magneto-optical or magnetic (col. 1, ll. 28-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russo, Bush, Abecassis, and Hayashi implementing the buffer including a drive such as a magnetic drive, or magneto-optical drive as taught by Kawamura in order to efficiently record data onto a medium without errors, thus creating a more robust and error tolerant system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone numbers

for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

ayk
April 21, 2003